

need for continual updating of information available to health care professionals and concurs well with the 1984 report of the Advisory Committee on the Management of Severe Chronic Pain in Cancer Patients, which is available to physicians on request to the Department of National Health and Welfare.

W.C. Appel, PhD
Bureau of Human Prescription Drugs
Health Protection Branch
Department of National Health and Welfare
Vanier, Ont.

Newborn circumcision: an economic perspective

We read with interest the article by Cadman and colleagues on newborn circumcision (*Can Med Assoc J* 1984; 131: 1353-1355). We subscribe to the authors' opinion, stated in the last paragraph, that "prophylactic neonatal circumcision should be regarded as cosmetic surgery, paid for directly by parents wishing it, and that public health care dollars should be expended on preventive and therapeutic measures of more certain health or economic benefit".

In 1984 the fee for routine or prophylactic circumcision was removed from British Columbia's schedule for reimbursements by the Medical Services Plan at the instigation of the Section of Paediatrics of the BC Medical Association. Thus, parents who want their son circumcised are charged privately.

Robert H. Hill, BM, FRCPC
Chairman
Paul N. Thiessen, MD, FRCPC
Clinical assistant professor
Department of Paediatrics
Faculty of Medicine
University of British Columbia
President
Section of Paediatrics
British Columbia Medical Association
Vancouver, BC

Can essential fatty acid deficiency predispose to AIDS?

Acquired immune deficiency syndrome (AIDS) is characterized by profound immunodeficiency and a

high incidence of Kaposi's sarcoma.¹⁻³ Eisenstat and Wormser⁴ recently reported a high rate (about 64%) of seborrheic dermatitis among patients with AIDS; the dermatitis usually occurred before or coincident with the development of symptoms of AIDS. These findings may give a clue as to the factor(s) that may predispose to AIDS.

Women with benign breast disease or breast cancer have an elevated rate of cutaneous sebum production compared with unaffected controls.^{5,6} Sebaceous glands hypertrophy under conditions of essential fatty acid deficiency.⁷ Administration of evening primrose oil, a rich source of linoleic acid and of its metabolite, γ -linolenic acid, to women with benign breast disease led to significant improvement in their condition.^{8,9} These findings suggest that overproduction of sebum, benign breast disease and, possibly, seborrheic dermatitis are all due to essential fatty acid deficiency. Since seborrheic dermatitis is common in AIDS, is it likely that AIDS is also due to such a deficiency?

Kohn and colleagues¹⁰ showed that linoleic acid and arachidonic acid can inactivate animal herpes, influenza, Sendai and Sindbis viruses within minutes of contact. Schlager and associates^{11,12} demonstrated that peritoneal macrophages in mice can be activated by linolenic acid and that linolenic-acid-enriched macrophages are markedly tumouricidal; they conclusively proved that lymphokine activation of macrophages is due to an increase in their linolenic acid content to about two to three times control values. My colleagues and I¹³ showed that the genetic damage induced by radiation and benzo[a]pyrene in mice can be prevented or reversed by γ -linolenic acid. Hence, it is conceivable that a lack or deficiency of linoleic acid and γ -linolenic acid in a person can lead to failure of virus inactivation during viral infections, that macrophage activation may not occur and that genetic damage due to these viruses and other agents cannot be reversed or prevented. As a result, immunodeficiency may occur, and viruses may proliferate and cause genetic damage leading to the activation of oncogenes and cancer.

NUTRITION

The Diet-Heart Debate

Dr. Raymond Reiser, Ph.D.

critiques the rationale of the American Heart Association's Diet-Heart Statement in an article first printed in the American Journal of Clinical Nutrition. The Distinguished Professor Emeritus at Texas A&M questions the relevance to diet of research that was designed to test a drug. For a reprint of the article write:

Nutrition Services
Dairy Bureau of Canada
20 Holly Street
Toronto, Ontario
M4S 3B1

Please send me _____ copies of
Dr. Reiser's article.

Dr.

Address

The wasting and nutritional problems in many patients with AIDS coupled with the high rate of seborrheic dermatitis in AIDS suggest that essential fatty acid deficiency could be one of the predisposing factors for AIDS. If so, administration of evening primrose oil should be of help in this disorder, for which no adequate treatment is presently available.

U.N. Das, MD
Efamol Research Institute
Kentville, NS

References

1. Gottlieb MS, Schroff R, Schanker HM et al: *Pneumocystis carinii* pneumonia and mucosal candidiasis in previously healthy homosexual men: evidence of a new acquired cellular immunodeficiency. *N Engl J Med* 1981; 305: 1425-1431
2. Fauci AS, Macher AM, Longo DL et al: Acquired immunodeficiency syndrome: epidemiologic, clinical, immunologic and therapeutic considerations. *Ann Intern Med* 1984; 100: 92-106
3. Weber J: Is AIDS an epidemic form of African Kaposi's sarcoma? *J R Soc Med* 1984; 77: 572-576
4. Eisenstat BA, Wormser GP: Seborrheic dermatitis and butterfly rash in AIDS [C]. *N Engl J Med* 1984; 311: 189
5. Goolamali SK, Shuster S: A sebrotropic stimulus in benign and malignant breast disease. *Lancet* 1975; 1: 428-429
6. Sinclair HM: Essential fatty acids and the skin. *Br Med Bull* 1958; 14: 258-262
7. Horrobin DF: The role of essential fatty acids and prostaglandins in breast cancer. In Chen LA, Reddy BS (eds): *Diet, Nutrition and Cancer: a Critical Evaluation*, CRC Pr, Boca Raton, Fla (in press)
8. Petrakis NL, Mason ML, Doherty M et al: Effects of altering diet fat of breast fluid lipids in women [abstr]. *Fed Proc* 1977; 36: 1163
9. Preece PE, Hanslip JJ, Gilbert L et al: Evening primrose oil for mastalgia. In Horrobin DF (ed): *Clinical Uses of Essential Fatty Acids*, Eden Pr, Montreal, 1982: 147-153
10. Kohn A, Gitelman J, Inbar M: Unsaturated free fatty acids inactivate animal enveloped viruses. *Arch Virol* 1980; 66: 301-307
11. Schlager SI, Madden LD, Meltzer MS et al: Role of macrophage lipids in regulating tumoricidal activity. *Cell Immunol* 1983; 77: 52-68
12. Schlager SI, Meltzer MS: Role of macrophage lipids in regulating tumoricidal activity: II. Internal genetic and external physiologic regulatory factors controlling macrophage tumor cytotoxicity also control characteristic lipid changes associated with tumoricidal cells. *Cell Immunol* 1983; 80: 10-19
13. Das UN, Devi GR, Rao KP et al: Ben-

zo(a)pyrene and radiation induced genetic damage in mice can be prevented by gamma-linolenic acid but not by arachidonic acid. *Nutr Res* (in press)

Outbreak of pertussis in a small community

The recent report by Sheps of pertussis in a vaccinated 12-year-old girl (*Can Med Assoc J* 1984; 131: 1467-1468) prompted us to share our experience of a small pertussis epidemic in Edmundston, NB.

Between August 1983 and February 1984, 52 patients who had a persistent cough with or without paroxysm and choking were suspected of having pertussis. The results of culture were positive in 11 of the patients, eight boys and three girls. Four were 6 months of age or younger, three were between 2 and 5 years, and four were between 7 and 14 years. The vaccination status of the children over 6 months of age was appropriate except in one child, who had missed his second booster of diphtheria-pertussis-tetanus vaccine. Clinically, pertussis was most severe in the four infants: three required hospitalization, and all had a paroxysmal cough associated with choking and vomiting of phlegm. Two of the infants also had episodes of apnea and bradycardia and required oxygen. The older children had only persistent cough and occasional episodes of choking and vomiting.

It is vital that pertussis be recognized early and treated appropriately with antibiotics to eradicate the causative pathogens from the nasopharynx and to reduce spreading of the infection.¹ Although the symptoms are less severe in children who have been vaccinated, pertussis can still cause substantial morbidity, absence from school and apprehension among parents and teachers, and can reach epidemic proportions.

Kuldip K. Malhotra, MB, BS, FRCPC
Donald Levasseur, MD, FRCPC
110 Canada Rd.
Edmundston, NB

Reference

1. Bass JW, Klenk EL, Kotheimer JB et al: Antimicrobial treatment of pertussis. *J Pediatr* 1969; 75: 768-781

Statistically significant or significant?

Biostatisticians are greatly valued by clinical investigators. After pre-planning the harvest of information, they sort the statistically significant wheat from the chaff of chance.

Those nine tongue-twisting syllables can't be repeated too often, so the single word "significant" gets used. This is where the trouble starts because it means "important" in ordinary talk. A wicked temptation might rear up in the subconscious of the noble investigator to fail to make clear which meaning is intended. Levels of a nontoxic metal in hair might be higher ($p < 0.01$) for one group of people than another, though both are within the acceptable range. This difference is "highly significant" in a general sense. Horsefeathers!

We can't succeed in changing the common usage of "significant", so we should seek a new word for "statistically significant". Statisticians, please neologize. Don't be constrained by the language of the ancient Greeks or Romans — they didn't have a strong tradition of controlled clinical trials.

One pundit suggested to me a jolly acronym to get the ball rolling — "muthoc" (most unlikely to have occurred by chance). This has a fine Saxon ring to it. In the above example the difference might be muthoc but it would not be significant (meaning important). At the 5% level the difference would only be "uthoc". The converse, "choc" (could have occurred by chance) — well, perhaps.

This got me interested. The verb "hap" means "chance", as in "happen". Why don't we substitute one word for three and use "haptive" for "not statistically significant"? This could then give us the antitheses "antihaptive" or "ahaptive" to mean statistically significant. These could be qualified to primahaptive (at the 1% level) or pentahaptive at 5%.

I see a need for a neologism. Reactions and suggestions?

John Markham, MB, FRCPC
Senior occupational health physician
City of Calgary
Calgary, Alta.